

# Atlantic Richfield Company

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September 4, 2013

## **CERTIFIED – RETURN RECEIPT REQUESTED**

Ms. Jere Johnson  
Remedial Project Manager  
U.S. Environmental Protection Agency Region 9  
75 Hawthorne Street, SFD-9-1  
San Francisco, CA 94105

**Subject: August 2013 Monthly Report, Yerington Mine Site, Lyon County, Nevada:  
Administrative Order for Remedial Investigation and Feasibility Study (RI/FS),  
CERCLA Docket No. 96200760005; Administrative Order on Consent, CERCLA  
Docket No. 096200960010**

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency " Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this August 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

## **August 2013 Activities**

### Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent activities. Cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- With the exception of the Pumpback Well System (PWS) Evaporation Pond, all wind dancers were in operation, including the unit located at the Slot Pond. Following the July 4 rain event, a wind dancer was activated on the berm between the middle and south Lined Evaporation Pond (LEP) cells. Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds with the exception of the VLT Pond, as directed by EPA, with start/stop times adjusted to accommodate daylight hours. Bird Guard towers 'A', 'B' and 'C' around the PWS and LEP continued to operate. ARC resumed bird mitigation activities at the VLT Pond.
- Arcadis observed the bird mitigation program, conducted refresher training, and upgraded training materials, on August 1.
- Arimetco FMS pond levels: Phase 1 Pond = 3.67 feet; FMS Evaporation Pond = 8.89 feet; VLT Pond = 11.03 feet; Slot 2 Pond = 11.97 feet. Approximately 56,534 gallons of solution were transferred from the VLT pond to the FMS Evaporation Pond on August 14 to test the new pump. See attached monitoring data.
- Approximately 32,248 gallons of solution were pumped from the leak detectors including 11,700 gallons from SD2 near the Slot Pond and approximately 19,813 gallons from VLTD1 at the VLT Pond. A total of approximately 1,229,904 gallons of solution have been pumped from the leak detectors since January 1. See attached monitoring data.
- A dedicated pump, float switch and flow meter were installed in the leak detector at the VLT Sediment Pond.

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## August 2013 Activities 6 Continued

### Site Security and O&M Activities " Continued

- Broadbent Engineering, Summit Engineering and Desert Engineering investigated, on August 7, the locations for the new evaporation ponds to be located adjacent to FMS Evaporation Pond.
- Continued to check on access to the LEP and UEP for the application of dust suppressant and, due to a precipitation event on August 21, dust suppression equipment cannot access the ponds.
- Fawcett Electric completed electrical modifications at the EPA trailer and front gate on August 1.
- Safety barrier blocks were installed and painted to prevent vehicular traffic from entering the area of the new wash pad.

### Site Characterization Activities

- Monthly groundwater elevation measurements were obtained August 27-29.
- A pit lake water elevation of 4230.13 feet amsl was recorded on August 27, 2013 from the pressure transducer, a decrease of approximately 0.21 feet since July 27, 2013. The pit lake elevation has risen approximately 1.772 feet since August 27, 2012.
- No new residences were added to the Bottled Water Program in August 2013. Two residences (DW#87 and DW#136) moved and their homes are currently unoccupied. Bottled water delivery to the two residences has stopped until the homes are occupied again.
- No changes to the domestic well sampling program occurred in August.
- Transmitted the 2Q 2013 Domestic Well Monitoring Report (DWMR) on August 23.
- Continued to compile information for the 2Q 2013 Groundwater Monitoring Report (GMR).
- Performed the 3Q 2013 groundwater monitoring event during the first half of August.
- Prepared for the 3Q 2013 domestic well monitoring event.
- Continued modifications to the Revised Groundwater (OU#1) RI Work Plan, and associated appendices and attachments, based on EPA comments received on February 27.
- Continued pre-drilling activities associated with the Additional Monitor Well Work Plan (e.g., access agreements for off-Site locations, procurement of a drilling contractor and contracting with a utility locator for on-Site locations). Continued the development of responses to EPA comments on the Work Plan, which were received on July 29, and modifications to the Work Plan.
- Continued the evaluation of hydrologic tracer data and the preparation of the Hydrologic Tracer Data Summary Report (DSR).
- Transmitted final responses to EPA comments on the Public Information Tech Memo for a portion of the Groundwater Study Area, and the revised Tech Memo, to EPA on August 5.
- Continued groundwater flow modeling activities.
- Continued geochemical modeling of groundwater quality data and interpretation of results.
- Continued to compile and evaluate analytical data from standing water samples that were collected from various locations on the Site after the July 4 precipitation event.
- Installed HydraSleeve™ samplers in well WW#10 on August 27 at seven intervals spaced 50 feet apart from the top of the water column (approximately 130 feet below top of casing) to the total depth of 460 feet below top of casing. Intervals were selected using temperature and conductivity logs, which showed no significant variations with depth through the water column.
- Field work continued during the periods of August 12-16 and 16-19 for the OU#3 sub-surface utility and dry well investigation, which included pad demolition at fuel filling stations, excavation to determine if USTs are present in the Process Areas, and soil sampling of impacted soils.
- Discussed the next steps for the OU#3 sub-surface utility and dry well investigations, and the revisions to the OU#3 FSAP, with CH2M Hill personnel on August 28 via conference call.
- Continued work on the DSR for the OU#3 sub-surface utility and dry well investigations.
- Initiated the responses to EPA comments on the draft OU#3 Field Sampling and Analysis Plan (FSAP), and initiated modifications to the revised FSAP.
- Routine database management activities and support of Site investigations and reports.

## **Planned September/October 2013 Activities**

### Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- As needed, assist EPA and NDEP with FMS capacity information.

### Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2013 GMR.
- Perform the 3Q 2013 domestic well monitoring event and the 4Q 2013 groundwater monitoring event in September and October, respectively, and compile available data for inclusion in the 3Q 2013 GMR and the 3Q 2013 DWMR.
- Continue to prepare the Preliminary Bedrock Well Investigation DSR.
- Complete the compilation of hydrologic tracer data from the May 2012 sampling event, and transmit the DSR to EPA in October.
- Continue to modify the revised Site-Wide Groundwater (OU"1) RI Work Plan and prepare responses to EPA comments.
- Initiate field activities for the Additional Monitor Well Work Plan including the mobilization of two sonic core drill rigs to the Site, and transmit a revised Work Plan and associated responses to EPA comments.
- Continue geochemical modeling activities in support of future fate and transport analysis.
- Continue aquifer solids testing activities.
- Continue to develop a Work Plan for supplemental characterization activities for the Evaporation Ponds and the northern portion of the Calcine Ditch.
- Complete remaining Phase II geophysical and soil investigations associated with sub-surface utilities in the Process Areas, and continue to compile the data. Continue preparation of the DSR when all geophysical and analytical data become available.
- Complete and transmit to EPA the revised FSAP, and associated responses to EPA comments on the draft FSAP, in accordance with the revised OU"3 RI Work Plan.
- Initiate the collection of groundwater grab samples from WW"10 in accordance with the OU"3 RI Work Plan.
- Review data quality objectives for the Wabuska Drain (OU"7) RI Work Plan when received.
- Attend the public meeting in Yerington scheduled for September 12.
- Attend a meeting with EPA and other project stakeholders on October 10 to discuss interim groundwater mitigation measures.

Please contact me at (714) 228-6774 or via e-mail at [jack.oman@bp.com](mailto:jack.oman@bp.com) if you have any questions or comments about the August 2013 monthly report.

Sincerely,



Jack Oman  
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail  
Harry Ball, EPA – via electronic mail  
Andrew Helmlinger, EPA – via electronic mail  
Tom Dunkelman, EPA – via electronic mail  
Greg Lovato, NDEP – via electronic mail  
Jeryl Gardner, NDEP – via electronic mail  
Tom Olsen, BLM – via electronic mail  
Dan Newell, City of Yerington – via electronic mail  
Phyllis Hunewill – via electronic mail  
Virgil Arellano, Lyon County Commissioner – via electronic mail  
Rob Loveberg, Lyon County Planning Department – via electronic mail  
Tom Grady, Nevada State Assembly – via electronic mail  
Deborah Dunn, YPT – via electronic mail  
Chairwoman Howard, YPT – via electronic mail  
Dietrick McGinnis, McGinnis and Associates – via electronic mail  
Tom Bowden, Ridolfi, Inc. – via electronic mail  
Chairwoman McFalls, WRPT – via electronic mail  
Tad Williams, WRPT – via electronic mail  
Ron Halsey, Atlantic Richfield Company – via electronic mail  
James Lucari, Atlantic Richfield Company – via electronic mail  
Marc Ferries, Atlantic Richfield Company – via electronic mail  
Brian Johnson, Atlantic Richfield Company – via electronic mail  
John Batchelder, EnviroSolve – via electronic mail  
Jim Chatham, Atlantic Richfield Company – via electronic mail  
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